

ABSTRACT

In a microprocessor for executing an instruction program into which a power control instruction has been automatically inserted, an occurrence of a problem (bugs) which is caused by automatically inserting the power control instruction is prevented, while the power control instruction designates power control operations for individually controlling electric power with respect to operation resources of the microprocessor. Also, when the problems happen to occur, a problem which is caused by writing the instruction program can be discriminated from another problem which is caused by an instruction which is automatically inserted by a compiler.

The microprocessor is provided with: a power control register 702 for storing thereinto information as to operation resources in which power control operations designated by a power control instruction should be carried out; a power control circuit 703 for outputting power control signals by which power control operations are carried out with respect to the respective operation resources based upon the information stored in the power control register 702; a power control permission register 704 into which information for indicating whether or not the power control operation is carried out has been previously set; and a gate circuit 705 for gating the respective power control signals based upon the information set by the power control permission register 704.